SUMMARY OF THE
FIELD MEASUREMENTS COMMITTEE MEETING
JUNE 30 AND JULY 1, 1998

The Field Measurements Committee of the National Environmental Laboratory Accreditation Conference (NELAC) met on Tuesday, June 30, 1998, at 1:30 p.m. Central Daylight Time (CDT) as part of the Fourth NELAC Annual Meeting in San Antonio, TX. The committee reconvened on July 1, 1998 at 8:30 am. The meeting was led by its chair, Dr. Barton Simmons of the California EPA. A list of action items is given in Attachment A. A list of committee participants is given in Attachment B.

INTRODUCTION

Dr. Simmons first had each of the committee members introduce himself or herself. He then explained that a vote to convert the committee status from ad hoc to standing status cannot be taken this week but must be delayed since the NELAC Constitution and Bylaws require items to be placed on the voting agenda one year in advance. A formal notice will be made this week of our committee's intent to ask to become a standing committee. Dr. Simmons outlined a revised agenda. The committee will work with the Board to decide what is expected from this committee in the coming year and how to proceed.

INITIAL DISCUSSIONS

Two ideas are: (1) proceed with the development of standards for field measurements, for example, source sampling; (2) propose a strategy for sampling standards; one option is to develop sampling guidelines rather than sampling standards (one audience member, speaking for a group of private labs, later in the meeting recommended that the committee remain ad hoc and work to ensure that field sampling and measurements be included in the standards of other committees). Discussion ensued. It was generally agreed that standards, rather than guidelines, should be the product. Whatever is developed must agree with the statements of the Quality Systems committee and other committees. Use of existing standards and protocols developed by ASTM and others should be examined and adopted if appropriate. The chairman summarized the thinking of the group by stating that the committee will interact with the Board of Directors and suggest that it (1) move ahead with drafting a standard of its own for field measurements and (2) begin discussions with other committees to revise and refine their standards to incorporate field measurements and sampling.

Concern was expressed whether a certified laboratory would lose its accreditation if it did not use a qualified sampling team. This needs further study. The Chapter 5 Quality Systems committee also needs to address field sample collection and to interact with the ad hoc committee.

It was suggested that a different terminology be used for the committee. Perhaps "Field Activities" would be more appropriate since it would include measurements and sampling. Another comment noted the lack of homogeneity in descriptions of field labs and mobile labs.

STRUCTURE OF PROPOSED STANDARDS

Field standards could be established in several ways: (1) amend the existing standards only; (2) write new standards for field activities only; (3) modify existing standards and write new standards for field activities. The consensus was that method (3) would be best to follow.

OUTREACH EFFORTS

Not all stakeholders are currently included in the Field Measurements deliberations and thought process. How can we effect further outreach? Mr. Daniel Bivins reviewed the plans for producing a video on NELAC and field measurements. The video will be broad; filming is going on today. This video would be broadcast to all State and EPA Regional Offices and available to others with hookups. Hard copies of the video would also be available. The broadcast is planned for October or November 1998, and will be heavily advertised to attract a large audience. Ms. Jeanne Mourrain and Mr. Bivins will be on-line during the broadcast and will accept calls and answer questions following the video broadcast.

The chair asked the committee to think on who or what agencies may need to be informed. Those mentioned were: State agencies for air, water, etc.; media-specific organizations (for example, ECOS); major remedial contractors and engineering firms (ACES has been contacted); Gas Research Institute; other State associations; USGS (a representative was present); biological survey and testing firms; Superfund contractors; the Bureau of Reclamation; Texas Hazardous Waste Society.

Methods of outreach on NELAC field measurements planning can include: direct communication with the chairman of the committee; the NELAC web pages; and the video.

POTENTIAL CHANGES TO EXISTING CHAPTERS RELEVANT TO FIELD MEASUREMENTS

Mr. John Hosenfeld briefly reviewed standards for the On-Site Assessment and Quality Systems (Chapters 3 and 5). He concluded that although the chapters contain a wealth of applicable standards, word smithing is needed to broaden the scope; at times it is appropriate to add information to Chapters 3 and 5; at other times information needs to be put in a new chapter for field measurements. Examples of additions that may be needed are: frequency of mobile lab inspections; revisions to training manual; cross-training of auditors so they can inspect both field sampling activities and the testing associated with regulatory requirements; appendixes with information for interviews of field samplers and assessment of on-site activities.

An audience member noted that we are essentially talking about measurement systems and not a restrictive definition of a fixed laboratory. We need to better communicate this. This concept is already being written into Chapter 1, Program Policy and Structure.

PRIORITIES FOR FIELD MEASUREMENT STANDARDS

The Quality Systems committee requested a list of priorities for incorporation into potential field measurement standards. Priority field measurement activities are: source testing; soil/gas testing;

immunoassays; continuous measurements such as pH, conductivity, and temperature; flow measurements, especially of water; continuous monitoring in general; semi-continuous monitoring (such as TSP and PM10).

Priority areas for other field sampling standards are: soil sampling for volatiles (an ASTM standard exists); chain-of-custody; collection of a representative sample (an ASTM standard for heterogenous mixtures exists); sample preservation; duplicate and split sample use; training; and methods to evaluate sampling quality.

The session concluded with discussion of the definition of a laboratory and whether individuals could be certified. The committee reminded participants that it is not the intent of NELAC to certify individuals; it accredits organizations.

The meeting was adjourned at 4:50 p.m. by the chair.

The meeting reconvened at 8:30 a.m. July 1, 1998. The chair reviewed discussions from yesterday's meeting and set a schedule of topics for this morning's meeting.

PERFORMANCE BASED MEASUREMENT SYSTEMS (PBMS)

The status of PBMS for the OSW and Superfund programs was reviewed by committee member Ms. Joan Fisk. OAR and Superfund PBMS programs are just beginning implementation; they are now at the stage of obtaining contractor services. A milestone is to get one or two pilot programs underway in one or two EPA Regions. Guidance and training, especially with respect to use of the DQO process, are important right now. Standards for the fixed laboratories and field activities are expected to be similar. Variations in standards and application of the DQO process within the acid rain and indoor air programs were presented. There was some discussion on what DQOs are and what education and training are needed. There is also a need to make clear exactly what is meant by PBMS. Flexibility is important; not all formats fit all needs. However, flexibility must not lead to loose interpretation of the regulations. PBMS should also apply to the sampling process, not just to field measurements.

There is a need to know the schedule for implementation of PBMS within NELAC. There is also a need to know when training is to occur. It was noted that many other PBMS programs are already in place and working. There are legal issues with some measurement methods. In compliance monitoring (source, clean water) there are restrictions on what methods can be used. NELAC standards need to be flexible enough for all in the environmental monitoring community.

A list of general and specific references for field standards was distributed to the audience. Comments were heard on each of the listed references and the chairman asked for additional references. Some mentioned were: "Volume III, Stationary Source Measurements, of the EPA Quality Assurance Handbook for Air Pollution Measurement Systems"; U.S. Army Corps of Engineers EM 200-1-3, "Guidance for Preparation of Sampling and Analysis Plans"; various ASTM standards, including those currently being worked on by ASTM Committees D-34, D-19, and D-22.

CONCLUDING DISCUSSION

The committee discussed again the choice of writing standards versus creating guidelines. Several committee members voiced an opinion that NELAC should concentrate on standards and not guidelines. Chapter 5 could be expanded to encompass field measurements and sampling but many labs do not collect the samples themselves. One member of the audience stated that NELAC's job is to ensure methods used in the field are acceptable, not to prepare guides on actually how to do the work. A NELAC board member reminded the committee that NELAC is voluntary, i.e., the states are not required to accredit all fields of testing. The chair suggested that standards be prepared even though every state may not adopt them

Mr. Larry Keith spoke about the American Chemical Society's efforts in certification programs for chemists and chemical technicians. A firm has been hired to develop a program; test questions are being prepared. A driving force for this program is the fact that certification of an individual could follow him or her from one job to another.

Several comments were made about certifying those who collect the samples. Concern was expressed that the laboratory should not be charged with policing the activities of sampling personnel. The responsibility must be on the individual doing the sampling. Concern was expressed about having check boxes on the chain of custody form to denote the sample was collected by an organization that was NELAC-accredited and which was following NELAC standards. The laboratory must somehow be able to know the correct process is actually being followed. It was suggested that the sampling firm submit their paperwork directly to the client rather than to the laboratory.

A list of action items was developed. This is included as Attachment A. The meeting was adjourned at 10:35 a.m.

Attachment A

ACTION ITEMS
FIELD MEASUREMENTS COMMITTEE MEETING
JUNE 30 AND JULY 1, 1998

Item No.	Action Item	Date To Be Completed
1.	Set date for next committee teleconference	7/1/98
2.	Revise the Q & A information sheet	7/4/98
3.	Revise the communications strategy	7/4/98
4.	Make proposal to the NELAC Board of Directors	10/1/98
5.	Communicate with other committees regarding their standards	12/1/98
6.	Redraft the AQME document	10/1/98
7.	Investigate and study results from PBMS pilot studies	4/1/98
8.	Compile standards related to field activities	10/1/98
9.	Draft an issues papers for Board of Directors; list various options	10/1/98
10.	Compile useful ASTM and other standards	12/1/98

Attachment B

PARTICIPANTS
FIELD MEASUREMENTS COMMITTEE MEETING
JUNE 30 AND JULY 1, 1998

Name	Affiliation	Phone Numbers
Dr. Barton Simmons, Chair	CA EPA	T: 510-540-3112 F: 510-540-2305 E: bsimmons@ix.netcom.com
Ms. Ann Marie Allen	MA Dept. of Env. Protection	T: 508-682-5237 F: 508-688-0352 E: ann.marie.allen@state.ma.us
Mr. Daniel G. Bivins	USEPA/OAR	T: 919-541-5244 F: 919-541-1039 E: bivins.dan@epamail.epa.gov
Ms. Maude J. Bullock	Dept. of the Navy, Naval Ops, Env. Prot.	T: 703-602-1738 F: 703-602-5547 E: bullockm@n4.opnav.navy.mil
Mr. Kevin Coats	U.S. Army Corps of Engineers	T: 402-697-2563 F: 402-697-2595 E: kevin.h.coats@usace.army.mil
Mr. Bill Cosgrove	USEPA/Region 4	T: 706-355-8616 F: 706-355-8744 E: cosgrove.bill@epamail.epa.gov
Ms. Joan Fisk	USEPA/OSWER	T: 703-603-8791 F: 703-603-9104 E: fisk.joan@epamail.epa.gov
Mr. Thomas L. Francoeur (absent)	Atlantic Ecotechnologies/ TEG NE	T: 207-829-6752 F: 207-829-6754 E: tfrancouer@compuserv.com
Mr. Clifford Glowacki	Ashland Chemical Company	T: 614-790-3482 F: 614-790-4294 E: cglowacki@ashland.com
Mr. John Hosenfeld	Midwest Research Institute	T: 816-753-7600x1336 F: 816-531-0315 E: jhosenfeld@mriresearch.org
Ms. Marlene O. Moore	Advanced Systems Inc.	T: 302-834-9796 F: 302-995-1086 E: mmoore@advancedsys.com
Mr. Wynand H. Nimmo (absent)	AZ Dept. Health Services	T: 602-255-3454 F: 602-255-3462 E: wnimmo@hs.state.az.us
Ms. Colleen F. Petullo (absent)	USEPA/OAR	T: 702-798-2446 F: 702-798-2465 E: petullo@aol.com
Mr. Andrew Tintle	FL Dept. of Environmental Protection	T: 850-488-2796 F: 850-922-4614 E: tintle_a@dep.state.fl.us
Dr. W. Cary Eaton (Contractor Support)	Research Triangle Institute	T: 919-541-6720 F: 919-541-7215 E: wce@rti.org